CONTENTS

Special Issue: 200th Volume Celebration Issue
(Abstracts/contents lists published in: Chem. Abstr.; Curr. Contents, Phys. Chem. Earth Sci., Life Sci.)

Preface by L. Hough and A. C. Richardson xi

X-Ray and conformational investigation of 6-deoxy-7-*C*-(2-furyl)-1,2:3,4-di-*O*-isopropylidene-L-*glycero*-α-D-*galacto*-heptopyranose
J. W. Krajewski, P. Gluziński, Z. Urbańczyk-Lipkowska, J. Ramza, and A. Zamojski (Warsaw, Poland) 1

Structural analysis of xyloglucan oligosaccharides by ^{1}H-n.m.r. spectroscopy and fast-atom-bombardment mass spectrometry
W. S. York, H. van Halbeek, A. G. Darvill, and P. Albersheim (Athens, GA, U.S.A.) . . 9

An n.m.r. and conformational analysis of the terminal trisaccharide from the serologically active glycolipid of *Mycobacterium leprae* in different solvents
K. Bock, T. Hvidt, J. Marino-Albernas (Valby, Denmark), and V. Verez-Bencomo (Havana, Cuba) 33

High-sensitivity structural analyses of oligosaccharide probes (neoglycolipids) by liquid-secondary-ion mass spectrometry
A. M. Lawson, W. Chai, G. C. Cashmore, M. S. Stoll, E. F. Hounsell, and T. Feizi (Harrow, U.K.) 47

Analysis of oligosaccharide epitopes of meningococcal lipopolysaccharides by fast-atom-bombardment mass spectrometry
A. Dell, P. Azadi, P. Tiller, J. Thomas-Oates (London, U.K.), H. J. Jennings, M. Beurret, and F. Michon (Ottowa, Canada) 59

The effect of double-bond geometry on the crystallographic conformations of two enopyranuronates
J. C. Barnes, J. S. Brimacombe (Dundee, U.K.), and D. J. Irvine (Fife, U.K.) 77

On the extent of chair distortion in "tetra-axial" derivatives of 2,3,4-tri-*O*-benzoyl-β-D-xylopyranose
F. W. Lichtenthaler and H. J. Lindner (Darmstadt, F.R.G.) 91

Interaction of cyclodextrins (cyclomalto-oligosaccharides) with glycolipids: n.m.r. studies of aqueous systems of cyclomaltohexaose and alkyl glycosides
B. Casu, A. Grenni, A. Naggi, G. Torri, M. Virtuani, and B. Focher (Milan, Italy) 101

N-Substituted (β-D-galactopyranosylmethyl)amines, and *C*-β-D-galactopyranosylformamides, and related compounds
J. N. BeMiller, M. P. Yadav (West Lafayette, IN, U.S.A.), V. N. Kalabokis, and R. W. Myers (Carbondale, IL, U.S.A.) 111

Synthese der verzweigten Nonasaccharid-Sequenz der "bisected" Struktur von *N*-Glycoproteinen
H. Paulsen, M. Heume, and H. Nurnberger (Hamburg, F.R.G.) 127

Reaction of amino sugars with malondialdehyde
A. Gómez-Sánchez, I. Maya, and I. Hermosín (Seville, Spain) 167

Complexing of carbohydrates with copper ions: a reappraisal
S. J. Angyal (Kensington, NSW, Australia) 181

Synthesis and ring-opening reactions of 4-chloro-4-deoxy-α-D-galactopyranosyl 3,4-anhydro-1,6-dichloro-1,6-dideoxy-β-D-*lyxo*-hexulofuranoside
R. Khan, G. Patel, and K. S. Mufti (Reading, U.K.) 189

Anomalous Zemplén deacylation reactions of 2-*O*-acyl-3-*O*-alkyl or -3-*O*-glycosyl derivatives of D-galactose and D-glucose: synthesis of *O*-α-D-mannopyranosyl-(1→4)-*O*-α-L-rhamnopyranosyl-(1→3)-D-galactose and an intermediate for the preparation of 2-*O*-glycosyl-3-*O*-(α-D-mannopyranosyl)-D-glucoses
Z. Szurmai, A. Lipták (Debrecen, Hungary), and G. Snatzke (Bochum, F.R.G.) 201

Stereocontrolled synthesis of lankanolide from 1,6-anhydro-β-D-glucopyranose (levoglucosan): 1, synthesis of the C-1/7 and C-8/15 segments
N. K. Kochetkov, D. V. Yashunsky, A. F. Sviridov, and M. S. Ermolenko (Moscow, U.S.S.R.) 209

Convenient syntheses of 5-*O*- and 3,5-di-*O*-(β-D-galactofuranosyl)-D-galactofuranose
R. M. de Lederkremer, C. Marina, and O. Varela (Buenos Aires, Argentina) 227

Two routes to enantiomerically pure 3-aminoinososе derivatives
R. J. Ferrier and A. E. Stütz (Wellington, New Zealand) 237

A stereoselective synthesis of pyruvic 4.6-acetals of D-hexopyranose residues
G. O. Aspinall, I. H. Ibrahim, and N. K. Khare (Toronto, Ont., Canada) 247

The use of immobilised glycosyltransferases in the synthesis of sialyloligosaccharides
C. Augé, R. Fernandez-Fernandez, and C. Gautheron (Orsay, France) 257

Stereoselective synthesis of sialyl-lactotetraosylceramide and sialylneolactotetraosylceramide
A. Kameyama, H. Ishida, M. Kiso, and A. Hasegawa (Gifu, Japan) 269

O-Alkylation at the anomeric centre for the stereoselective synthesis of Kdo-α-glycosides
A. Esswein, H. Rembold, and R. R. Schmidt (Konstanz, F.R.G.) 287

Syntheses of hepta-, hexa-, and penta-pivalates of trehalose by selective pivaloylation
R. Cortes Garcia, L. Hough, and A. C. Richardson (London, U.K.) 307

N-*p*-Methoxybenzylidene derivatives of 2-amino-2-deoxy-D-glucose as glycosyl donors: a reinvestigation
A. Marra, and P. Sinaÿ (Paris, France) 319

Die Kristall- und Molekülstrukturen von einem Nitropentitol und von vier Nitrohexitolen
J. Kopf (Hamburg, F.R.G.), H. Brandenburg, W. Seelhorst, and P. Köll (Oldenburg, F.R.G.) 339

Reactive pseudo-oligosaccharides as potential irreversible inhibitors for sugar-binding proteins: synthesis of the diastereoisomers of (3,4,6/5)-3,4,-epoxy-6-(β-D-galactopyranosylthio)-5-hydroxycyclohexene
J. Lehmann, and B. Neumann (Freiburg, F.R.G.) 355

Synthesis of (1→4)-linked galacturonic acid trisaccharides, a proposed plant wound-hormone and a stereoisomer
Y. Nakahara, and T. Ogawa (Wako, Japan) 363

Synthesis of a trehalose homolog, 6-deoxy-α-D-*gluco*-heptopyranosyl 6-deoxy-α-D-*gluco*-heptopyranoside, and the corresponding bis(heptosiduronic acid)
H. H. Baer, R. L. Breton, and Y. Shen (Ottawa, Ont., Canada) 377

Purification of α-L-fucosidase by *C*-glycosylic affinity chromatography, and the enzymic synthesis of α-L-fucosyl disaccharides
S. C. T. Svensson, and J. Thiem (Münster, F.R.G.) 391

Details of the fine structure of nigeran revealed by the kinetics of its oxidation by periodate
T. J. Painter (Trondheim, Norway) 403

The use of bacteriophage-mediated depolymerisation in investigations of the structure of the capsular polysaccharide from *Klebsiella* serotype K71
G. E. Jackson, N. Ravenscroft, and A. M. Stephen (Rondebosch, South Africa) 409

Distribution of substituents in 2-hydroxypropyl ethers of cyclomaltoheptaose
J. Pitha, C. T. Rao (Baltimore, MD, U.S.A.), B. Lindberg, and P. Seffers (Stockholm, Sweden) 429

Base-catalyzed conversion of the α-L-iduronic acid 2-sulphate unit of heparin into a unit of α-L-galacturonic acid, and related reactions
R. N. Rej, and A. S. Perlin (Montreal, Quebec, Canada) 437

A structural investigation of the capsular polysaccharide of *Escherichia coli* O9:K57:H32
H. Parolis, L. A. S. Parolis, S. M. R. Stanley (Grahamstown, South Africa), and G. G. S. Dutton (Vancouver, B.C., Canada) 449

The structure of *Escherichia coli* K26 antigen
L. M. Beynon, and G. G. S. Dutton (Vancouver, B.C., Canada) 457

N-Substituted methyl 3,6-di-*O*-benzoyl-2-deoxy-2-hydroxyamino-α-D-hexopyranosid-4-uloses: a configurational reassignment
J. M. J. Tronchet, N. Bizzozero, G. Bernardinelli, and M. Geoffroy (Geneva, Switzerland) 469

Synthesis of methyl 3-*O*-α-D-galactopyranosyl-6-*O*-α-D-mannopyranosyl, methyl 3-*O*-α-D-glucopyranosyl-6-*O*-α-D-mannopyranosyl-α-D-mannopyranoside, methyl 6-*O*-α-D-galactopyranosyl-3-*O*-α-D-mannopyranosyl-α-D-mannopyranoside, and methyl 6-*O*-α-D-glucopyranosyl-3-α-D-mannopyranosyl-α-D-mannopyranoside
P. J. Garegg, S. Oscarson, and A.-K. Tidén (Stockholm, Sweden) 475

A convenient preparation of per-2,6,di-*O*-methylcyclomalto-oligosaccharides
K. Takeo (Kyoto, Japan) 481

Synthesis of methyl hexa-*O*-acetylacarviosin and the 6-acetoxy analogue
Y. Shibata, S. Ogawa, and T. Suami (Yokohama, Japan) 486

α,β-Unsaturated-7,3-lactone-nucleosides *via* an intramolecular Wittig reaction: a short route to nucleosides related to goniothalenol
M. Bessodes, R. Benamghar, and K. Antonakis (Villejuif, France) 493

A simple preparation of 2,3,4,6-tetra-*O*-acetyl-1-*S*-acetyl-1-thio-α-D-glucopyranose
A. Gadelle, J. Defaye (Grenoble, France), and C. Pedersen (Lyngby, Denmark) 497

The enzymic determination of the enantiomers of galactose
R. Sturgeon (Edinburgh, U.K.) 499

Author index c1

Subject index c3